

M. H. Matson,

Water Wheel.

No. 96,454.

Patented Nov. 2. 1869.

Fig. 1.

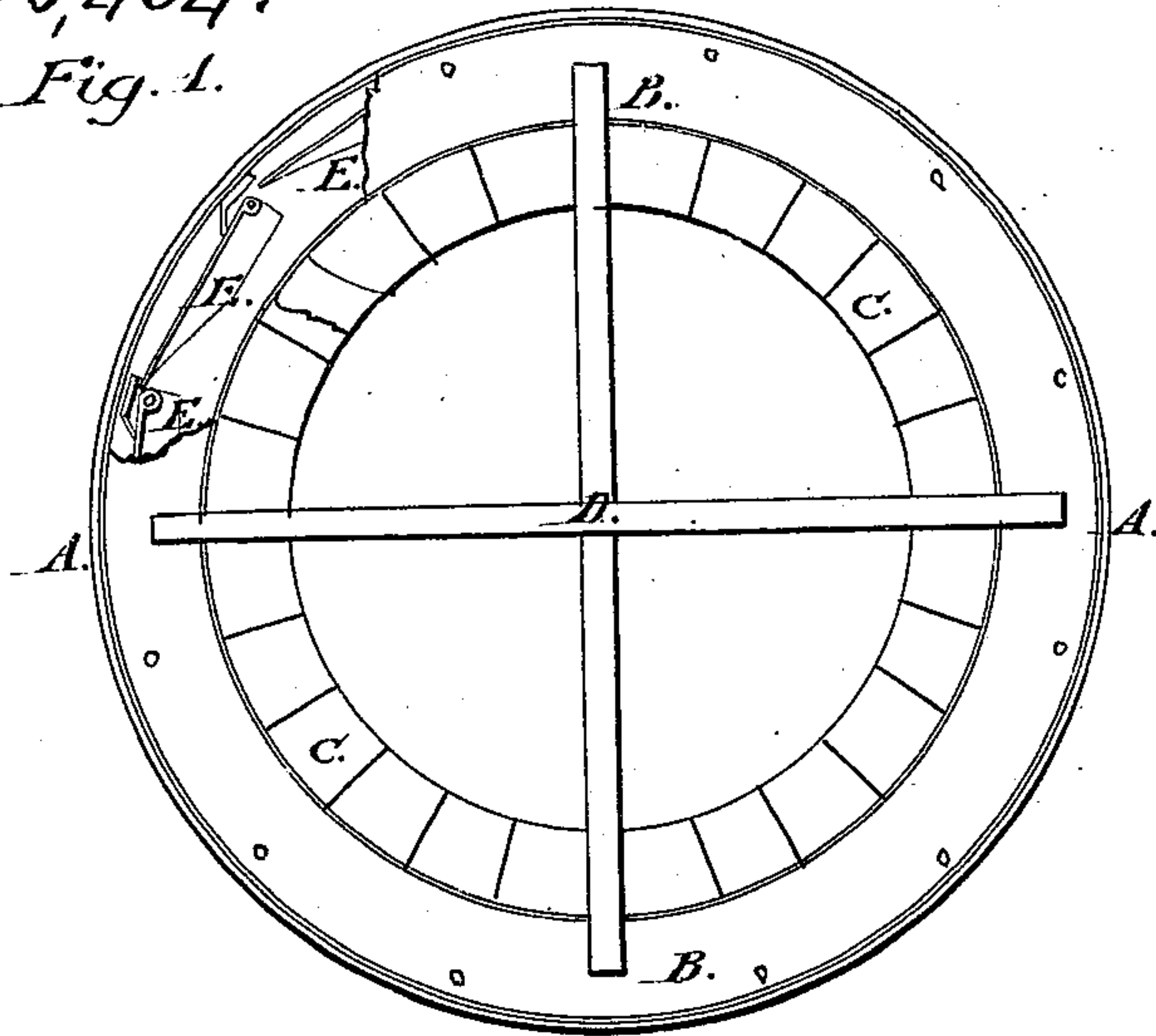
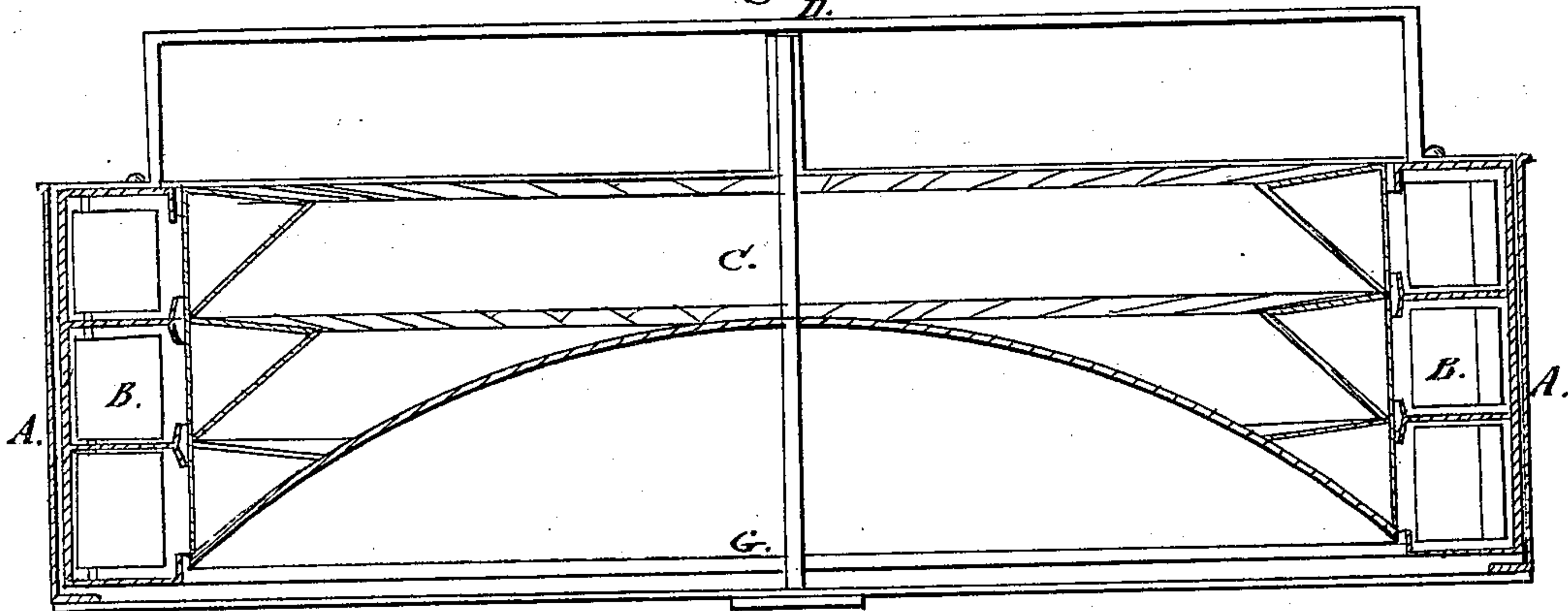


Fig. 2.



Witnesses
R. S. Turner
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MYRON H. MATSON, OF HORSEHEADS, NEW YORK.

Letters Patent No. 96,454, dated November 2, 1869.

IMPROVEMENT IN WATER-WHEELS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, MYRON H. MATSON, of Horseheads, in the county of Chemung, and in the State of New York, have invented certain new and useful Improvements in Water-Wheels; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction of a water-wheel, by means of which the speed of the machinery can be controlled at will, and in the arrangement of the devices, which will hereafter be fully set forth and described.

Figure 1 is a bottom view of my invention.

Figure 2 is a section view of the same, represented upside down.

Letter A represents a circular cap, which encloses the curb B and wheel C, and is so arranged that it can be raised and lowered, so as to regulate the flow of water upon the wheel.

This wheel C rests upon the flume D, and is composed of a number of tiers or compartments, placed one above the other, through which are cut the openings for the discharge of water.

These openings are so arranged that each one discharges the water downward, immediately behind the one just in front of it, which first strips the verge of the wheel, and then reacts, in a right line to the body of dead water, or cylinder end of the wheel.

In the top of the wheel there is an indentation

formed, which is covered over by the flat plate G, which rests upon the top of the curb B.

This curb is also formed of tiers or compartments, supported by pillars or columns.

Between these tiers there is pivoted a number of chutes, E, which guide the water to the wheel, and should be so hung that obstructions can pass through without injuring them. The inner edges of the tiers which compose the curb are turned upward, so as to form a rim, against which the ends of the chutes are pressed by the water.

By raising or lowering the cap A, the water can be made to pass through only one of the compartments of the wheel, when a low rate of speed is required, or can be made to open all at once, when a greater one is wanted.

Having thus described my invention,

What I claim, and desire to secure by Letters Patent, is—

The combination of the cap A, curb B, consisting of a number of tiers, between which the chutes E are hinged at one end, and the wheel C, all constructed to operate substantially as set forth.

In testimony that I claim the foregoing, I have hereunto set my hand and seal, this 4th day of May, 1869.

M. H. MATSON. [L. s.]

Witnesses:

THOMAS STONE,
STEPHEN WINFIELD.